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Robert Giehl

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EXAMINER

STEVENS, THOMAS H

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,161	Applicant(s) GIEHRL ET AL.	
	Examiner THOMAS H. STEVENS	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Section I: Prosecution Reopened

1. Applicants filed appeal brief on 02/11/2008. Based on the details of the brief the final office action is withdrawn and prosecution is re-opened.
2. Claims 1-9,13-23 were examined.
3. Claims 10-12 were cancelled.

Claim Interpretation

4. Office personnel are to give claims their "**broadest reasonable interpretation**" in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551(CCPA 1969). See *also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322(Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow") The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be

removed, as much as possible, during the administrative process. The machine control process consist of a computer-based network as stated on page 1 paragraph 0004.

Section II: Non-Final Rejection

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-9,13-23 are rejected under 35 U.S.C. 102(b) as being anticipated Schwenke ET al.(US Patent Schwenke; hereafter Schwenke). Schwenke discloses a data construct set (abstract).

Claim 1. Method for displaying data (e.g. of data, figure 15)of a machine control system (“control mechanisms” column 31, lines 10-26)comprising: receiving status data (“request status”, column 167, lines 27-46)for at least one element (column 84, lines 1-50)of the system, which represent at least one physical state variable (state variable emanates from the state machine, column 153, lines 57-61); representing the status data (“request status”, column 167, lines 27-46) which have been received for the element(column 84, lines 1-50); representing a circuit diagram (e.g., figure 107), which displays, at least for the element, (column 84, lines 1-50) an electrical connection of the element (column 84, lines 1-50)to other individual elements (column 84, lines 1-50)in

the system; where the representation of the status data ("request status", column 167, lines 27-46) which have been received for the element (column 84, lines 1-50) occurs in the represented circuit diagram (e.g., figure 107).

Claim 2. Method according to Claim 1, where the representation of the circuit diagram (e.g., figure 107) occurs using a characterization, which has been stored (figure 1A, elements 16 and 14) for the element, (column 84, lines 1-50) and associated connection data, which represent the electrical connection of the element (column 84, lines 1-50) in the system.

Claim 3. Method according to Claim 2, where the characterization allows the association of the element (column 84, lines 1-50) with its status data ("request status", column 167, lines 27-46).

Claim 4. Method according to Claim 1, where the status data ("request status", column 167, lines 27-46) are displayed one of at or on the represented element (column 84, lines 1-50) in the circuit diagram (e.g., figure 107).

Claim 5. Method according to Claim 1, where the step of receiving the status data ("request status", column 167, lines 27-46) also comprises an identification of elements, (column 84, lines 1-50) which are to be represented in the circuit diagram (e.g., figure 107), where the representation of the status data ("request status", column 167, lines 27-46) for the identified elements (column 84, lines 1-50) occurs.

Claim 6. Method according to Claim 1, where, in response to user input, which establishes a preset value (most CAD programs have preset values, column 2, lines 11-

24) for the represented status data, the preset value (most CAD programs have preset values, column 2, lines 11-24) is set as a value for the corresponding state variable (state variable emanates from the state machine, column 153, lines 57-61) in the machine control system("control mechanisms" column 31, lines 10-26).

Claim 7. Method according to Claim 1, where corresponding target values are displayed with the status data ("request status", column 167, lines 27-46)for the element(column 84, lines 1-50).

Claim 8. Method according to Claim 1, where corresponding limit values are displayed with the status data ("request status", column 167, lines 27-46)for the element (column 84, lines 1-50).

Claim 9. Method according to Claim 1, where previous status data ("request status", column 167, lines 27-46)for the element (column 84, lines 1-50)are represented, which indicate at least one previous value for the state variable (state variable emanates from the state machine, column 153, lines 57-61).

Claim 13. Method according to Claim 2, where the step of receiving the status data ("request status", column 167, lines 27-46)also comprises an identification of elements, (column 84, lines 1-50) which are to be represented in the circuit diagram (e.g., figure 107), where the representation of the status data ("request status", column 167, lines 27-46)for the identified elements(column 84, lines 1-50) occurs.

Claim 14. Method according to Claim 2, where, in response user input which establishes a preset value (most CAD programs have preset values, column 2, lines 11-

24) for the represented status data, the preset value (most CAD programs have preset values, column 2, lines 11-24) is set as a value for a corresponding state variable (state variable emanates from the state machine, column 153, lines 57-61) in the machine control system("control mechanisms" column 31, lines 10-26).

Claim 15. Method according to Claim 5, where, in response to the user input which establishes a preset value (most CAD programs have preset values, column 2, lines 11-24) for the represented status date, the preset value (most CAD programs have preset values, column 2, lines 11-24) is set as a value for the corresponding state variable (state variable emanates from the state machine, column 153, lines 57-61) in the machine control system("control mechanisms" column 31, lines 10-26).

Claim 16. Method according to Claim 2, where corresponding target values are displayed with the status data ("request status", column 167, lines 27-46)for the element (column 84, lines 1-50).

Claim 17. Method according to Claim 2, where corresponding limit values are displayed with the status data ("request status", column 167, lines 27-46)for the element(column 84, lines 1-50).

Claim 18. Method according to Claim 7, where corresponding limit values are displayed with the status data ("request status", column 167, lines 27-46)for the element(column 84, lines 1-50).

Claim 19. Method according to Claim 7, where previous status data ("request status", column 167, lines 27-46)for the element (column 84, lines 1-50)are represented which

indicate at least one previous value for the state variable (state variable emanates from the state machine, column 153, lines 57-61).

Claim 20. Method according to Claim 8, where previous status data ("request status", column 167, lines 27-46)for the element (column 84, lines 1-50)are represented which indicate at least one previous value for the state variable (state variable emanates from the state machine, column 153, lines 57-61).

Claim 21. Device for displaying data (e.g. of data, figure 15) of a machine control system, said device comprising: receiving means for receiving status data ("request status", column 167, lines 27-46)for at least one element (column 84, lines 1-50)of the system, which represent at least one physical state variable (state variable emanates from the state machine, column 153, lines 57-61); representing means for representing the status data ("request status", column 167, lines 27-46)which have been received for the element (column 84, lines 1-50)and for representing a circuit diagram (e.g., figure 107), which displays, at least for the element (column 84, lines 1-50)the electrical connection of the element (column 84, lines 1-50)to other individual elements (column 84, lines 1-50)in the system; where the representation of the status data ("request status", column 167, lines 27-46)which have been received for the element (column 84, lines 1-50)occurs in the represented circuit diagram (e.g., figure 107).

Claim 22. Device according to claim 21, where the device is a mobile end device, which is used for one of the startup process, maintenance or error diagnosis (suggestion of an

error message, column 55, lines 12-15) of a machine control system (“control mechanisms” column 31, lines 10-26).

Claim 23. A system comprising a device in combination with a machine control system (“control mechanisms” column 31, lines 10-26), wherein said device is adapted to display data of the machine control system, (“control mechanisms” column 31, lines 10-26) said device comprising: receiving means for receiving status data (“request status”, column 167, lines 27-46) for at least one element (column 84, lines 1-50) of the system, which represent at least one physical state variable (state variable emanates from the state machine, column 153, lines 57-61); representing means for representing the status data (“request status”, column 167, lines 27-46) which have been received for the element (column 84, lines 1-50) and for representing a circuit diagram (e.g., figure 107), which displays, at least for the element, (column 84, lines 1-50) the electrical connection of the element (column 84, lines 1-50) to other individual elements (column 84, lines 1-50) in the system; where the representation of the status data (“request status”, column 167, lines 27-46) which have been received for the element (column 84, lines 1-50) occurs in the represented circuit diagram (e.g., figure 107).

Section II: Response to Arguments

Final Rejection

7. The final rejection submitted on 8/14/07 is withdrawn in view the rejection by Schwenke as set forth above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure:

- US Patent 5,493, 508 discloses a methodology for generating structural descriptions of complex digital devices.
- US Patent 6,823,497 discloses a debugging fabricated hardware designs.
- US Patent 4,805,089 discloses controlling a process using a programmed digital computer with a set of process control programs.
- Dawson et al., "Computer-Aided Design of Electronic Circuits a User's Viewpoint" IEEE 1967 pg.1946-1954: discloses a method of computer-aided design.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715.

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Albert Decady (571-272-3819). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

/Albert Decady/
Supervisory Patent Examiner
Tech Center 2100